

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



(43) International publication date

27 May 2004 (27.05.2004)

PCT

(10) International publication number

WO 2004/044826 A1

(51) International patent classification<sup>7</sup>: G06K 9/00

(21) International application number: PCT/FR2003/003271

(22) International filing date: 3 November 2003 (03.11.2003)

(25) Language of filing: French

(26) Language of publication: French

(30) Data relating to the priority:  
02/14,030 8 November 2002 (08.11.2002) FR

(71) Applicant (*for all designated States except US*): SAGEM SA [FR/FR]; Le Ponant de Paris, 27, rue Leblanc, F-75015 Paris (FR).

(72) Inventors; and

(75) Inventors/Applicants (*US only*): COVA, Jean-François [FR/FR]; 42, rue Bouret, F-75019 Paris (FR). CHEVALIER, Frédéric [FR/FR]; 4, sente des Lys, F-78480 Verneuil sur Seine (FR).

(74) Representatives: GORREE, Jean-Michel, et al; Cabinet Plasseraud, 84, rue d'Amsterdam, F-75440 Paris Cedex 09 (FR).

(81) Designated states (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated states (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- With International Search Report.
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.

*For an explanation of the two-letter codes and the other abbreviations, reference is made to the explanations ("Guidance Notes on Codes and Abbreviations") at the beginning of each regular edition of the PCT Gazette.*

As printed

(54) Title: METHOD FOR IDENTIFICATION OF A PERSON BY RECOGNITION OF A DIGITAL FINGERPRINT

(54) Titre : PROCEDE D'IDENTIFICATION D'UNE PERSONNE PAR RECONNAISSANCE D'EMPREINTE DIGITALE

(57) Abstract: The invention relates to a method for identification of a person by recognition of a digital fingerprint, whereby the characteristic points on a digitised image of a digital fingerprint (E) are determined and transmitted (16) to a bank holding (17) the characteristic points of a number of digital fingerprints for comparison and identification (18) of the person to whom the photographed fingerprint belongs. When the fingerprint (E) is taken on a curved surface (3) of an object (12), the digitised image is transformed (13) into a plane-projection corrected digitised image, by means of an algorithm, in which the characteristic points are detected (15).

(57) Abrégé : Procédé d'identification d'une personne par reconnaissance d'empreinte digitale, selon lequel on détecte (15), sur une image numérisée d'une empreinte digitale (E), les points caractéristiques qui sont ensuite transmis (16) à une banque détenant (17) les points caractéristiques d'une multiplicité d'empreintes digitales, aux fins de comparaison et d'identification (18) de la personne possédant l'empreinte photographiée. Lorsque l'empreinte (E) est sur une surface courbe (3) d'un objet (12), on transforme (13), par traitement algorithmique, l'image numérisée en une image numérisée corrigée par projection plane, sur laquelle on détecte (15) les points caractéristiques.

WO 2004/044826 A1